1: Jochelson E-5 (1900-01) 1908 RY 4 Koryak RY4

000 the mice resort to suicide by hanging themselves in the crotches of branches.
137 The following roots are dug out of mice-holes: bulbs of martagon (*Fritillaria sarana*); *Claytonia acutifolia* Wild, called "sweet-root" by the Russians, ŕnat by the Koryak; roots of wild sorrel (*Polygonum polymorphum*);
222
262 the root called me'tčin by the Koryak and "bitter-root" by the Russians; and the roots of sedge grass (called pa'lxo by the Koryak). All these roots are eaten both raw and cooked. When eaten raw, they are dipped in seal-oil or pounded with roe. They are cooked with fish and reindeer-meat, either in the form of a porridge made of roots ground together with fish, or by cooking roots in seal or reindeer blood.

[264]

222
137
252
262
[264]

[251]

272]

Fig. 111. *a* (1/11), *b* (1/11). Picks for gathering Roots. Greatest length, 56 cm., 37 cm.

Willow-herb (*Epilobium angustifolium*; Koryak, mr'nmet occupies the first place among edible herbs. The stems of willow-herb are dried in bunches in the sun or over the hearth, and are chopped with stone hatchets (see Fig. 103). Pieces of seal-blubber or reindeer-fat are dipped into the powder thus obtained, and are thus eaten. The flour is also made into a pudding by grinding the crushed herb with berries and melted seal-oil. In Kamchatka the pith is taken from the split stems, dried in the sun, and stored away for winter use. The fresh leaves of willow-herb are used instead of tea, when the latter is lacking. In northern Kamchatka the Koryak use for food the stem of the sweet *Heracleum spandilium*.

Berries as well as roots are used fresh, raw, or cooked in porridge made of blood, or of cooked fish or meat. Berries also form an ingredient in puddings made of ground fish-roe, fat, and pounded fish. A favorite dish is furnished by the pounded flesh of sun-dried dog-salmon mixed with seal-oil and bleaberries. This mixture is pounded in wooden trays or dishes with wooden or bone pestles. A bone pestle is represented in Fig. 112. The following is a list of the principal berries used: *Empetrum nigrum*, *Vaccinium uliginosum*,

1: Jochelson E-5 (1900-01) 1908 RY4 Koryak RY4

boiled as a gruel. Most of the Koryak can rarely afford to have imported food, as they have no money with which to buy it. Biscuits and fresh bread also have the reputation of being good food; but these, too, very rarely come within their reach. In winter the cossaks and other Russian inhabitants take bread to the Koryak villages and camps, and exchange it for reindeer-meat and other products. Still the Koryak look upon biscuit and bread rather as a dainty, and not as a real food on which a human being can subsist. I have heard the Koryak say that when they eat too much bread, they suffer from stomach-ache.

Tea came to be known after the people had come into contact with the Russians. At present its use is wide-spread everywhere. Most of the Koryak, however, have no tea in summer, as they lack the means to buy large supplies. The kind of tea used is brick-tea. To make tea, the brick is heated by the hearth, as a result of which it becomes soft and can be minced with a knife. The minced tea is boiled in a tea-pot. The tea decoction is strong, and almost black in color. Brick-tea is inferior to leaf-tea as a stimulant. The Koryak drink much tea, ten and more cups in succession, and do so several times a day, provided they find any one willing to treat them. Usually the Koryak drink tea after meals; but when guests are feasted, a light side-dish, like sun-dried fish, marrow from reindeer-legs, or berry-pudding, is served first, then tea, and finally meat dishes. Tea is served in the same order by the other inhabitants of northeastern Siberia; for instance, by the Yakut, Tungus, and Yukaghir. A teapot and two or three cups of crockery or enamelled ware, with saucers, are found in nearly every house. They are preserved as treasures, in special boxes with holes chiselled out for the cups; or they are wrapped in soft rags. In the absence of a sufficient number of cups, they drink tea by turns, the women and children after the older people. Visitors usually bring their own cups with them. The Koryak also have home-made cups made of deer-antler and horn of the mountain-sheep. The small tin cans in which our condensed milk was put up were very cleverly turned into cups with tin handles. The Koryak drink the hottest tea from them without burning their lips.

Narcotics and Stimulants. — The Koryak have also learned the use of tobacco from the Russians, and, like all other Siberian natives, they are passionately fond of it. But while others, the Chukchee among them, mainly smoke tobacco, very few smokers are found among the Koryak. Generally they chew it, more rarely they snuff it, or they use it in both ways. They use strong Russian leaf-tobacco, imported from the south of European Russia, in bunches of about two pounds each.

For both chewing and snuffing, the tobacco is ground with ashes. Fig. 113 shows a wooden mortar with a pestle for grinding tobacco. When grinding the tobacco, dried leaves of cudweed (*Gnaphalium uliginosum* L.) are often added,